

Datasheet for ABIN3076535

**SEH1L Protein (AA 1-360) (Strep Tag)**[Go to Product page](#)**1** Image

## Overview

Quantity:	1 mg
Target:	SEH1L
Protein Characteristics:	AA 1-360
Origin:	Human
Source:	Tobacco (Nicotiana tabacum)
Protein Type:	Recombinant
Purification tag / Conjugate:	This SEH1L protein is labelled with Strep Tag.
Application:	ELISA, SDS-PAGE (SDS), Western Blotting (WB)

## Product Details

Sequence:	<p>MFVARSAAD HKDLIHDVSF DFHGRRMATC SSDQSVKVWD KESGDWHCT ASWKTHSGSV WRVTWAHPEF GQVLASCSFD RTAAVWEEIV GESNDKLRGQ SHWVKRTTLV DSRTSVTDVK FAPKHMGLML ATCSADGIVR IYEAPDVMNL SQWSLQHEIS CKLSCSCISW NPSSSRAHSP MIAVGSDDDSS PNAMAKVQIF EYNENTRKYA KAETLMTVTD PVHDIAFAPN LGRSFHILAI ATKDVRIFTL KPVRKELTSS GGPTKFEIHI VAQFDNHNSQ VWRVSWNITG TVLASSGDDG CVRLWKANYM DNWKCTGILK GNGSPVNGSS QQGTSNPSLG STIPSLQNSL NGSSAGRKHS</p> <p><b>Sequence without tag. The proposed Strep-Tag is based on experience s with the expression system, a different complexity of the protein could make another tag necessary. In case you have a special request, please contact us.</b></p>
Characteristics:	<p>Key Benefits:</p> <ul style="list-style-type: none"><li>• Made in Germany - from design to production - by highly experienced protein experts.</li><li>• Protein expressed with ALICE® and purified by multi-step, protein-specific process to ensure</li></ul>

correct folding and modification.

- These proteins are normally active (enzymatically functional) as our customers have reported (not tested by us and not guaranteed).
- State-of-the-art algorithm used for plasmid design (Gene synthesis).

This protein is a **made-to-order protein** and will be made for the first time for your order. Our experts in the lab will ensure that you receive a correctly folded protein.

The big advantage of ordering our **made-to-order proteins** in comparison to ordering custom made proteins from other companies is that there is no financial obligation in case the protein cannot be expressed or purified.

Expression System:

- ALiCE®, our Almost Living Cell-Free Expression System is based on a lysate obtained from *Nicotiana tabacum* c.v.. This contains all the protein expression machinery needed to produce even the most difficult-to-express proteins, including those that require post-translational modifications.
- During lysate production, the cell wall and other cellular components that are not required for protein production are removed, leaving only the protein production machinery and the mitochondria to drive the reaction. During our lysate completion steps, the additional components needed for protein production (amino acids, cofactors, etc.) are added to produce something that functions like a cell, but without the constraints of a living system - all that's needed is the DNA that codes for the desired protein!

Concentration:

- The concentration of our recombinant proteins is measured using the absorbance at 280nm.
- The protein's absorbance will be measured in several dilutions and is measured against its specific reference buffer.
- We use the ExPASy's ProtParam tool to determine the absorption coefficient of each protein.

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Purification:

Two step purification of proteins expressed in Almost Living Cell-Free Expression System (ALiCE®):

1. In a first purification step, the protein is purified from the cleared cell lysate using StrepTag capture material. Eluate fractions are analyzed by SDS-PAGE.
2. Protein containing fractions of the best purification are subjected to second purification step through size exclusion chromatography. Eluate fractions are analyzed by SDS-PAGE and Western blot.

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Purity:

>80 % as determined by SDS PAGE, Size Exclusion Chromatography and Western Blot.

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## Product Details

Endotoxin Level: Low Endotoxin less than 1 EU/mg (< 0.1 ng/mg)

Grade: Crystallography grade

## Target Details

Target: SEH1L

Alternative Name: SEH1L ([SEH1L Products](#))

Background: Nucleoporin SEH1 (GATOR2 complex protein SEH1) (Nup107-160 subcomplex subunit SEH1) (SEC13-like protein),FUNCTION: Component of the Nup107-160 subcomplex of the nuclear pore complex (NPC). The Nup107-160 subcomplex is required for the assembly of a functional NPC (PubMed:15146057, PubMed:17363900). The Nup107-160 subcomplex is also required for normal kinetochore microtubule attachment, mitotic progression and chromosome segregation. This subunit plays a role in recruitment of the Nup107-160 subcomplex to the kinetochore (PubMed:15146057, PubMed:17363900). {ECO:0000269|PubMed:15146057, ECO:0000269|PubMed:17363900}., FUNCTION: As a component of the GATOR2 complex, functions as an activator of the amino acid-sensing branch of the mTORC1 signaling pathway (PubMed:25457612, PubMed:23723238, PubMed:27487210, PubMed:36528027, PubMed:35831510). The GATOR2 complex indirectly activates mTORC1 through the inhibition of the GATOR1 subcomplex (PubMed:23723238, PubMed:27487210, PubMed:36528027, PubMed:35831510). GATOR2 probably acts as an E3 ubiquitin-protein ligase toward GATOR1 (PubMed:36528027). In the presence of abundant amino acids, the GATOR2 complex mediates ubiquitination of the NPRL2 core component of the GATOR1 complex, leading to GATOR1 inactivation (PubMed:36528027). In the absence of amino acids, GATOR2 is inhibited, activating the GATOR1 complex (PubMed:25457612, PubMed:26972053, PubMed:27487210). Within the GATOR2 complex, SEC13 and SEH1L are required to stabilize the complex (PubMed:35831510). {ECO:0000269|PubMed:23723238, ECO:0000269|PubMed:25457612, ECO:0000269|PubMed:26972053, ECO:0000269|PubMed:27487210, ECO:0000269|PubMed:35831510, ECO:0000269|PubMed:36528027}.

Molecular Weight: 39.6 kDa

UniProt: [Q96EE3](#)

Pathways: [Maintenance of Protein Location](#)

## Application Details

Application Notes: In addition to the applications listed above we expect the protein to work for functional studies

## Application Details

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as well. As the protein has not been tested for functional studies yet we cannot offer a guarantee though.

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### Comment:

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### Restrictions:

For Research Use only

## Handling

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### Format:

Liquid

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### Buffer:

The buffer composition is at the discretion of the manufacturer. If you have a special request, please contact us.

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### Handling Advice:

Avoid repeated freeze-thaw cycles.

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### Storage:

-80 °C

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### Storage Comment:

Store at -80°C.

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### Expiry Date:

Unlimited (if stored properly)



**Image 1.** „Crystallography Grade“ protein due to multi-step, protein-specific purification process